

WHAT IS CLAIMED IS:

1. A composition for treating a particulate comprising:

an aqueous particulate material treating agent comprising a dissolved sugar solid.
2. The composition of claim 1, wherein said dissolved sugar solid comprises between about 2 percent to about 60 percent by weight of a monosaccharide.
3. The composition of claim 2, wherein said dissolved sugar solid comprises between about 12 to about 18 percent by weight of said monosaccharide.
4. The composition of claim 1, further comprising a hygroscopic salt.
5. The composition of claim 4, wherein said hygroscopic salt is selected from the group consisting of magnesium chloride, sodium chloride, calcium chloride and potassium chloride.
6. A dust control and soil stabilizing composition comprising:

an aqueous dust control and soil stabilizing composition comprising a dissolved sugar solid.
7. The composition of claim 6, wherein said dissolved sugar solid comprises between about 2 percent to about 60 percent by weight of a monosaccharide.
8. The composition of claim 6, wherein said dissolved sugar solid comprises between about 12 percent to about 18 percent by weight of a monosaccharide.
9. The composition of claim 6, further comprising a hygroscopic salt.

10. The composition of claim 9, wherein said hygroscopic salt is selected from the group consisting of magnesium chloride, sodium chloride, calcium chloride and potassium chloride.

11. The composition of claim 1 or 6, wherein the sugar profile of said dissolved sugar solid comprises between about 2 to about 60 percent dextrose, between about 2 to about 60 percent maltose, between about 2 to about 60 percent maltotriose, and between about 15 to about 80 percent polymers of dextrose.

12. The composition of claim 2 or 7, wherein said monosaccharide comprises dextrose.

13. A composition for treating a particulate comprising:

between about 15 percent to about 50 percent by weight on a dry basis of a sugar solid, wherein said sugar solid comprises between about 2 percent to about 60 percent by weight of a monosaccharide; and

between about 60 percent to about 85 percent by weight on a dry basis of salt.

14. A composition for treating a particulate comprising:

a sugar-water solution having between about 15 to about 80 percent by weight of a dissolved sugar solid, wherein said dissolved sugar solid comprises between about 2 to about 60 percent by weight of a monosaccharide; and

a salt.

15. The composition of claim 14, wherein said dissolved sugar solid comprises between about 12 to about 18 percent of said monosaccharide.
16. The composition of claim 15, wherein said salt is a hygroscopic salt.
17. The composition of claim 16, wherein said hygroscopic salt is selected from the group consisting of magnesium chloride, sodium chloride, calcium chloride and potassium chloride.
18. A method of treating a particulate comprising applying to said particulate the composition of any of claims 1, 4, 6, 9, or 23.
19. The method of claim 18, wherein said particulate is a friable solid selected from the group consisting of gravel, a soil, a cinder, a sand, a mineral, coal, sawdust, woodchips, bark mulch, a dirt, coal dust, rock dust, clay, and an aggregate.
20. A method of treating a surface comprising applying to said surface an effective amount of the composition of any of claims 1, 4, 6, 9, or 23.
21. The method of claim 20, wherein said surface is selected from the group consisting of a road, a walkway, a parking lot, a floor, a coal pile, a runway, a helicopter landing pad, a driveway, a bicycle path, a jogging path, a forest trail, a garden path, a construction site, a mine tailing pond, a tailings pile, a slope or berm, a sand dune, a hillside, a mineral storage pile, a railway transit car, and a storage container.

22. A surface, wherein said surface has been treated with the composition of any of claims 1, 4, 6, 9, or 23.
23. A composition for treating a particulate comprising:
- between about 5 percent to about 50 percent by weight on a dry basis of a sugar solid.
24. The composition of claim 23, wherein said sugar solid comprises between about 2 percent to about 60 percent by weight of a monosaccharide.
25. The composition of claim 23, further comprising between about 60 percent to about 90 percent by weight on a dry basis of salt.
26. The composition of claim 1, 4, 5, 6, 9, 10, or 23, further comprising lignin.
27. The composition of claim 1, 4, 5, 6, 9, 10, or 23, further comprising a tracer.
28. The composition of claim 27, wherein said tracer is a fluorescent dye.